

Paratransit and its modernisation

A key aspect to foster transition for urban mobility

Day 2 - Thursday November 8th



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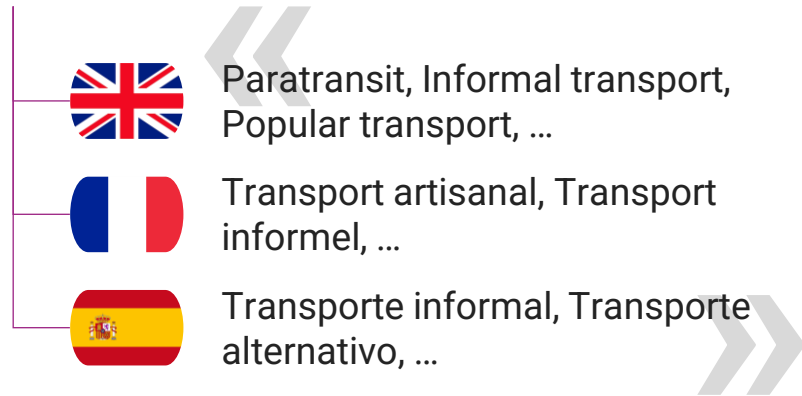
(Briefly) understanding paratransit



Paratransit? Or informal transport?



The definition of 'paratransit' might vary from one context to the next.



Regulation

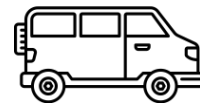


Organisation



Operations

Vehicle capacities



Modes most often associated with 'formal' public transport

Modes most often associated with paratransit

Paratransit (all) around the world

Vehicle capacities



Paratransit in Asia

Note: This slide was constructed using published information from Baffi & Musil (2021). All photo credits are from their document.

Vehicle capacities ←



Asia



Philippines



Jeepney



Van UV Express



Tricycle



Pedicab



Cambodia



Remork



Bajaj



Cyclo



Motodop



Indonesia



Angkot



Mikrolet



Bemo



Betor



Becak



Ojek

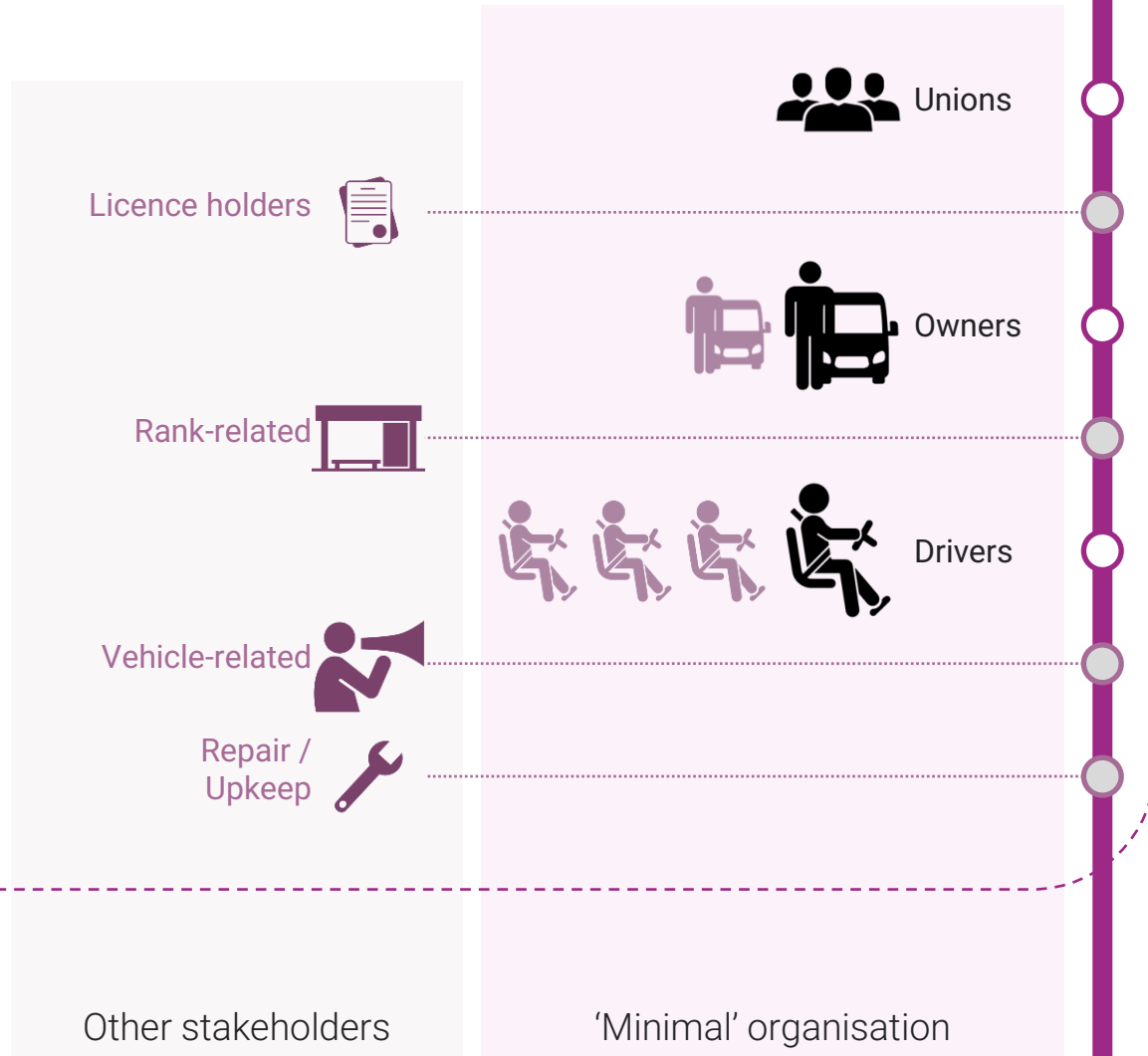


Vietnam



Xe Om

Paratransit stakeholders



Inefficiencies directly linked to current paratransit's organisation(s)

Income-driven complex structures

Lack of investment in fleet renewal

Dependency on daily income

Reduced wages (informal jobs)

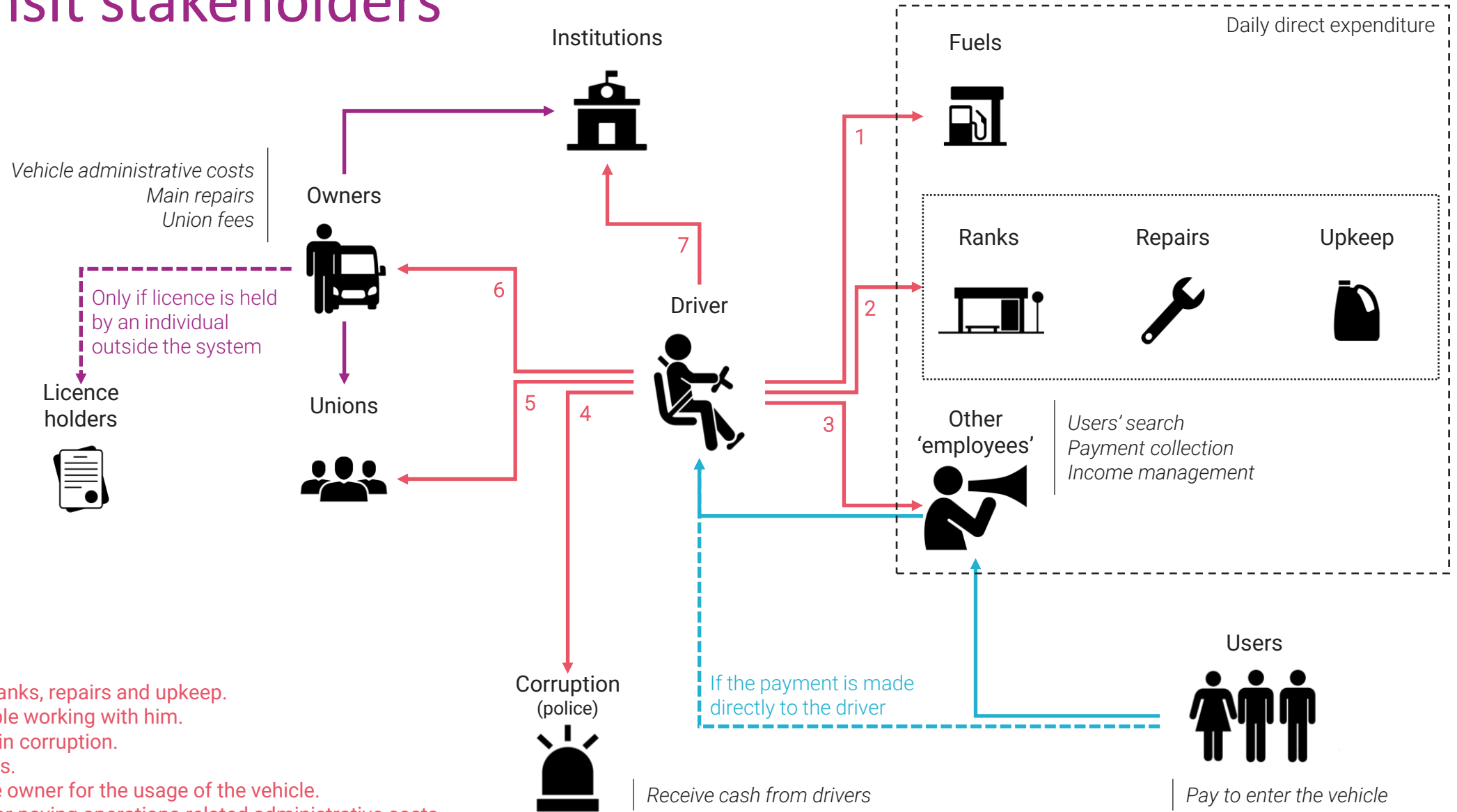


Institutions



Users

Paratransit stakeholders



The driver:

- [1] Buys fuels.
- [2] Pays usage of ranks, repairs and upkeep.
- [3] Pays other people working with him.
- [4] Can participate in corruption.
- [5] Pays unions fees.
- [6] Pays the vehicle owner for the usage of the vehicle.
- [7] Is responsible for paying operations-related administrative costs.

The role of paratransit

According to UITP, approximately

70%

of all public transport trips in the world
use paratransit modes

Even if paratransit services have **undeniable advantages**, they are most often recognised because of the **externalities** they (partly) generate:



Increasing congestion



Worsening road safety



Increasing levels of CO₂ emissions



Increasing local pollution levels



Stagnating harassment situations

Why is reform necessary?

Network



- Inefficiencies in network structures
- Long travel times, reduced mean speeds

Operations



- Poor service quality
- Path-dependencies hampering regulations

Working conditions



- Low-level, often informal, job opportunities
- Disruptive competition
- Lack of professionalisation



Paratransit in Vientiane, Laos | © C. Musil, 2010

The need for systemic reform

« The difficulty of introducing policies to **improve the quality of service and the articulation with the overall transport offer**, and the **precarious working conditions of the operators** justify the will of the public authorities to reform the paratransit offer in order to integrate it into the urban mobility system. »

MobiliseYourCity, 2021
Reforming paratransit – A catalogue of practical actions for policy-makers and practitioners



Paratransit in Indonesia | © C. Musil, 2022

Tools for systemic reform



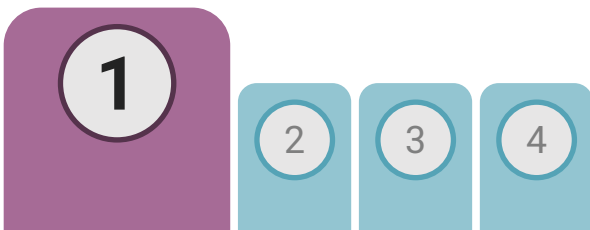
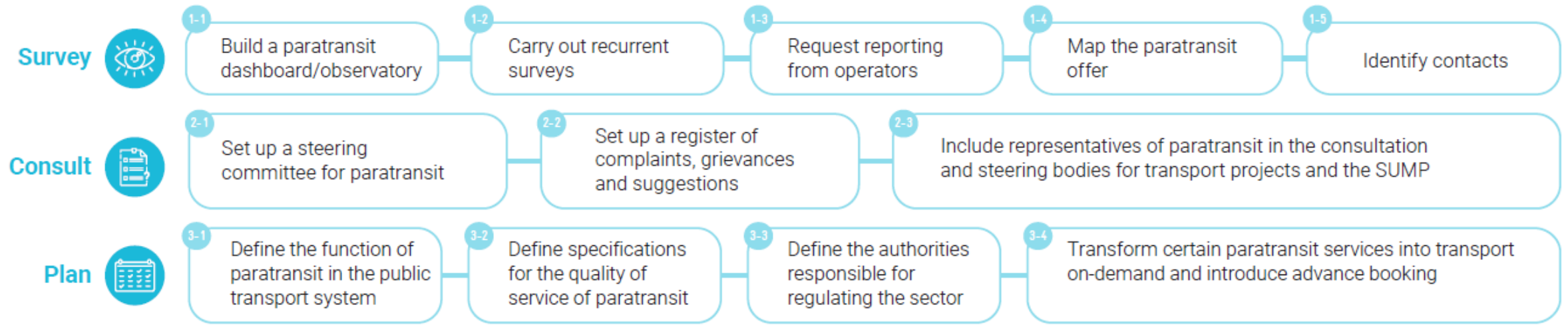
MobiliseYourCity's paratransit toolkit

A set of guidelines, case studies and training materials directly linked to paratransit reform.

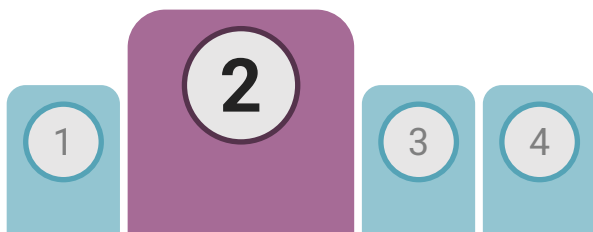
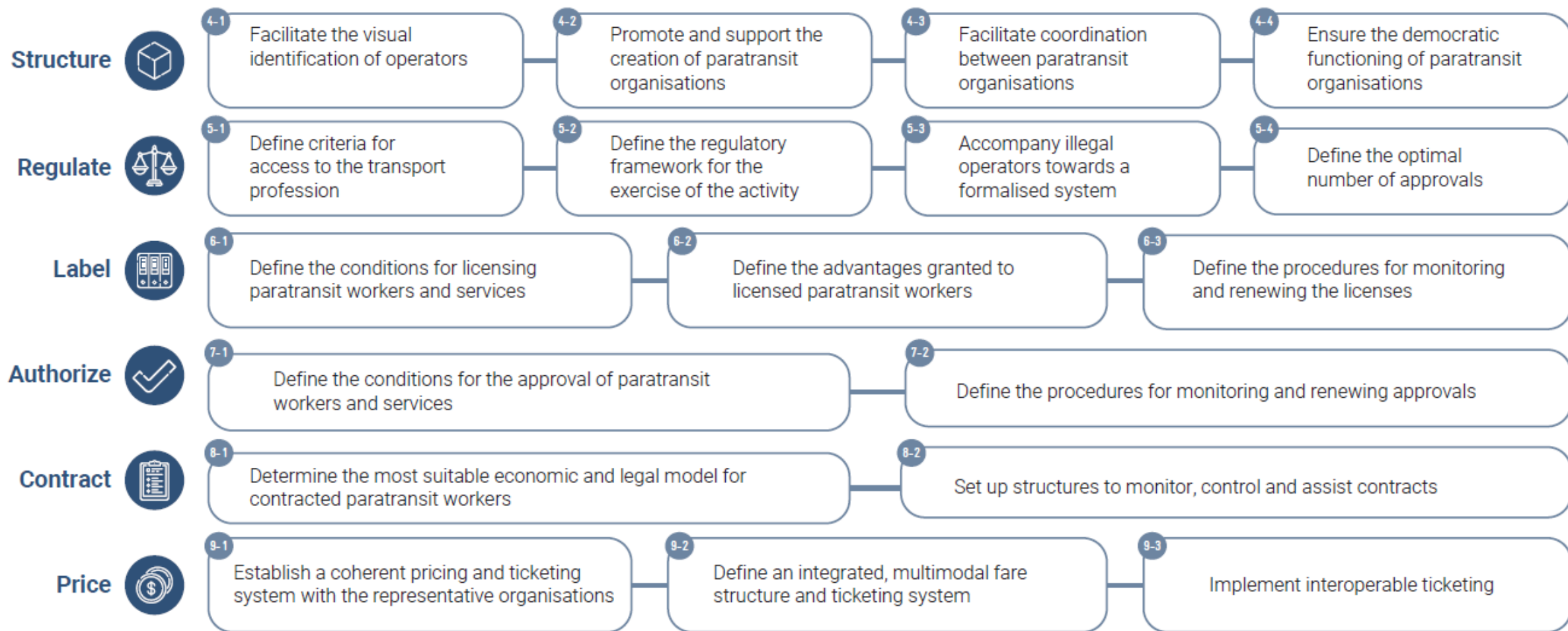
The objective is to generate a reform programme that is context-conscious : **all cities and all paratransit sectors are different and reform needs to be tailormade.**



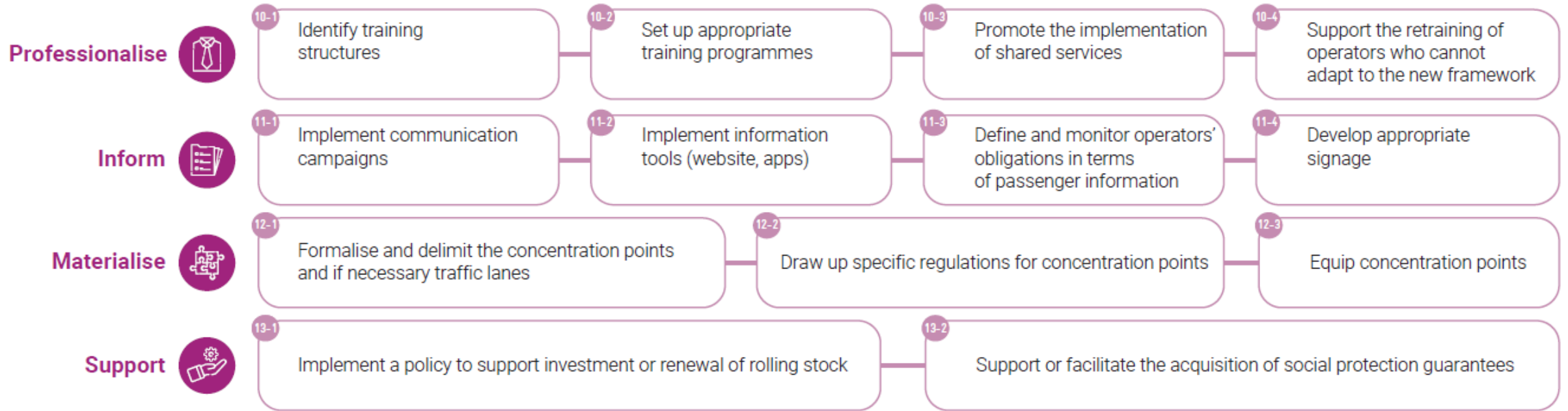
Paratransit toolkit – Step 1 : Preparing the reform



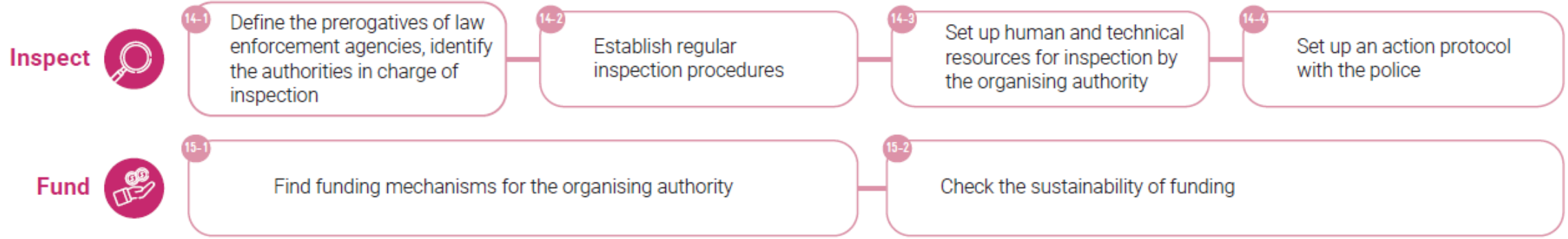
Paratransit toolkit – Step 2: Reforming the sector



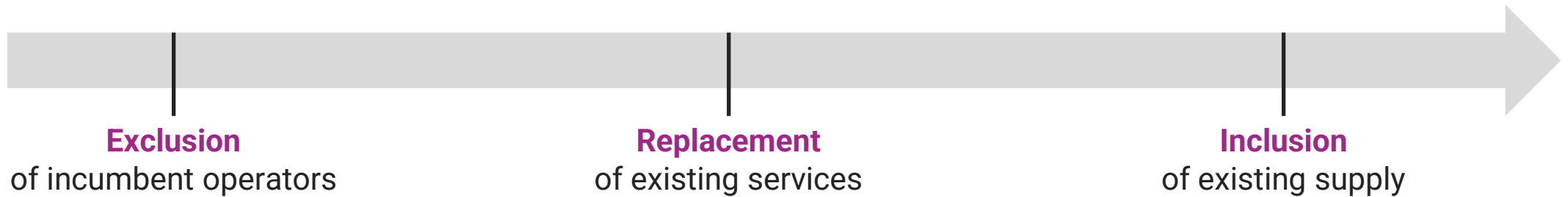
Paratransit toolkit – Step 3: Supporting the reform



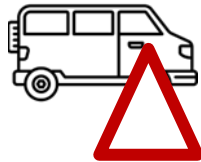
Paratransit toolkit – Step 4: Ensuring the implementation of reforms



Approaches to reform



Paratransit 'survives' only because the formal option is not yet available. Once it is available, incumbent operators will need to withdraw from the system.

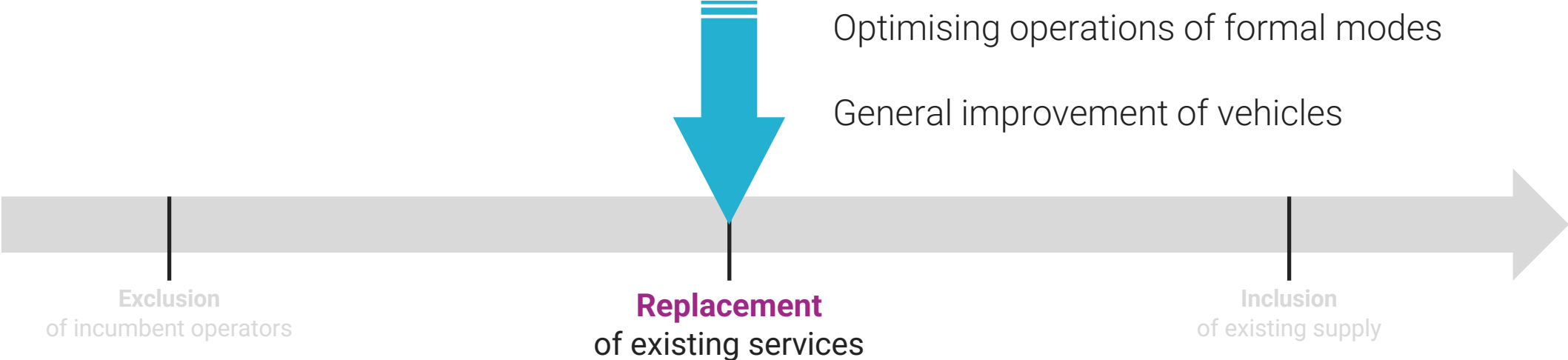


A systemic can be enacted for the paratransit sector, but only under conditions defined by authorities. Existing operators need to adhere to all regulations.



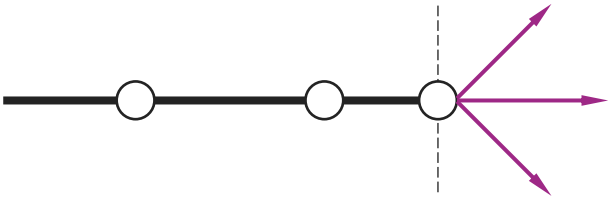
Paratransit services have characteristics that can be used when implementing a multimodal vision of public transport services.

Approaches to reform



Implementation of new BRT systems

Feeder services (Last mile)



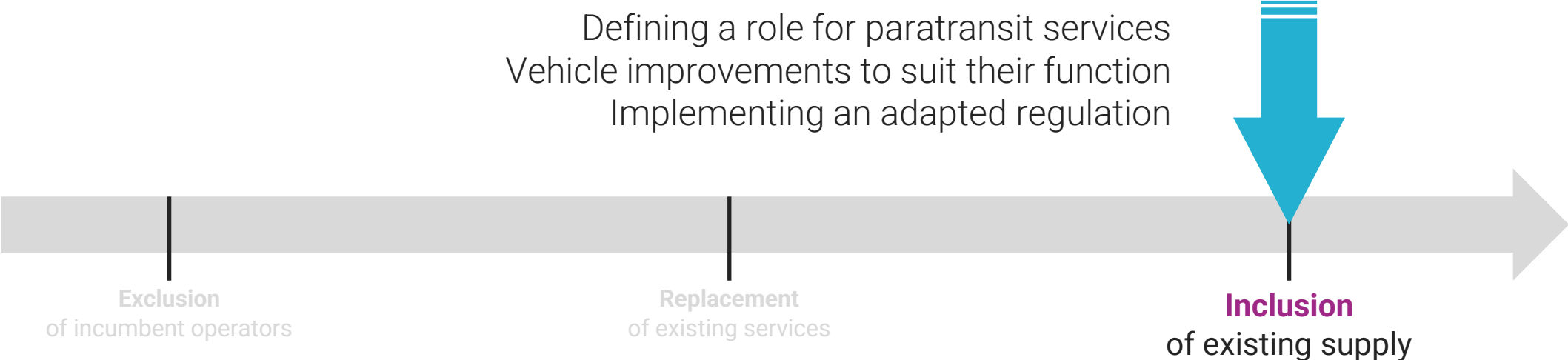
Fleet renewal programmes

One type of vehicle (homogenisation)



Approaches to reform

Defining a role for paratransit services
Vehicle improvements to suit their function
Implementing an adapted regulation



Give each mode a role in the system in accordance with its characteristics



Find the right mix of vehicles in the paratransit sector to secure its place in the system

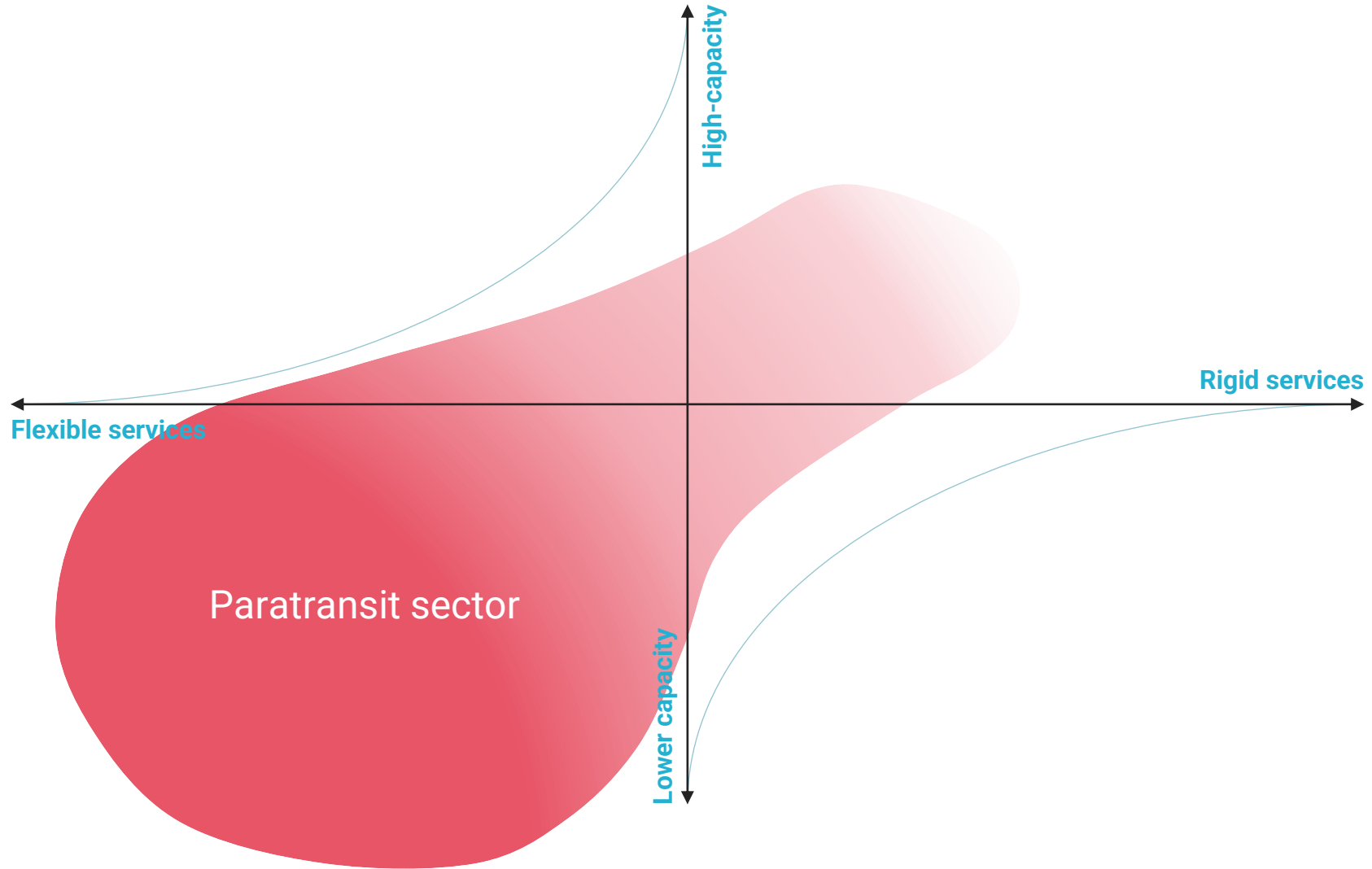


Define a coherent regulatory framework that allow for progressive improvement of paratransit

Balance in reforms



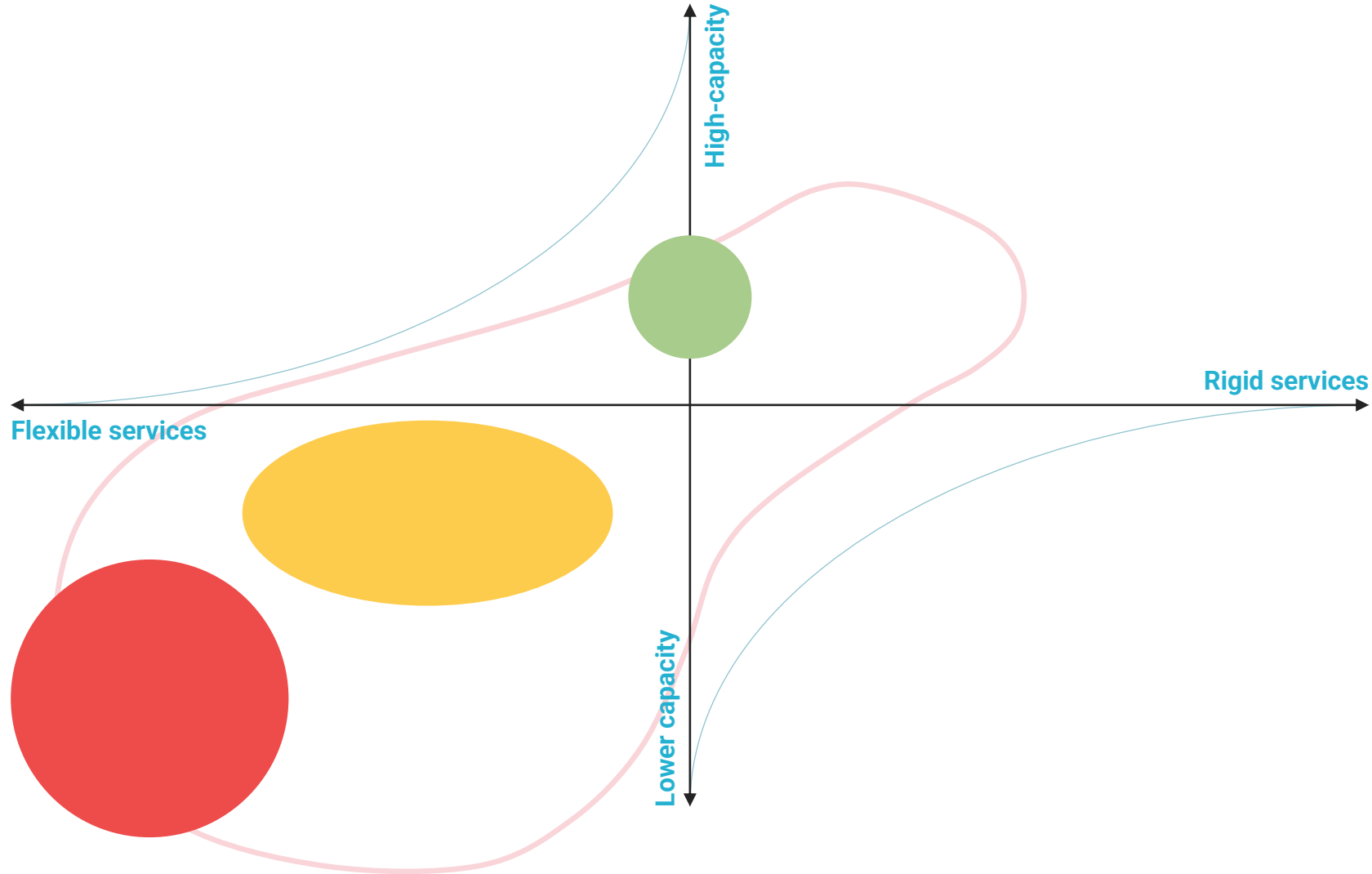
Mode capacity vs. Service flexibility



Mode capacity vs. Service flexibility

The example of Yaoundé
-The current situation-

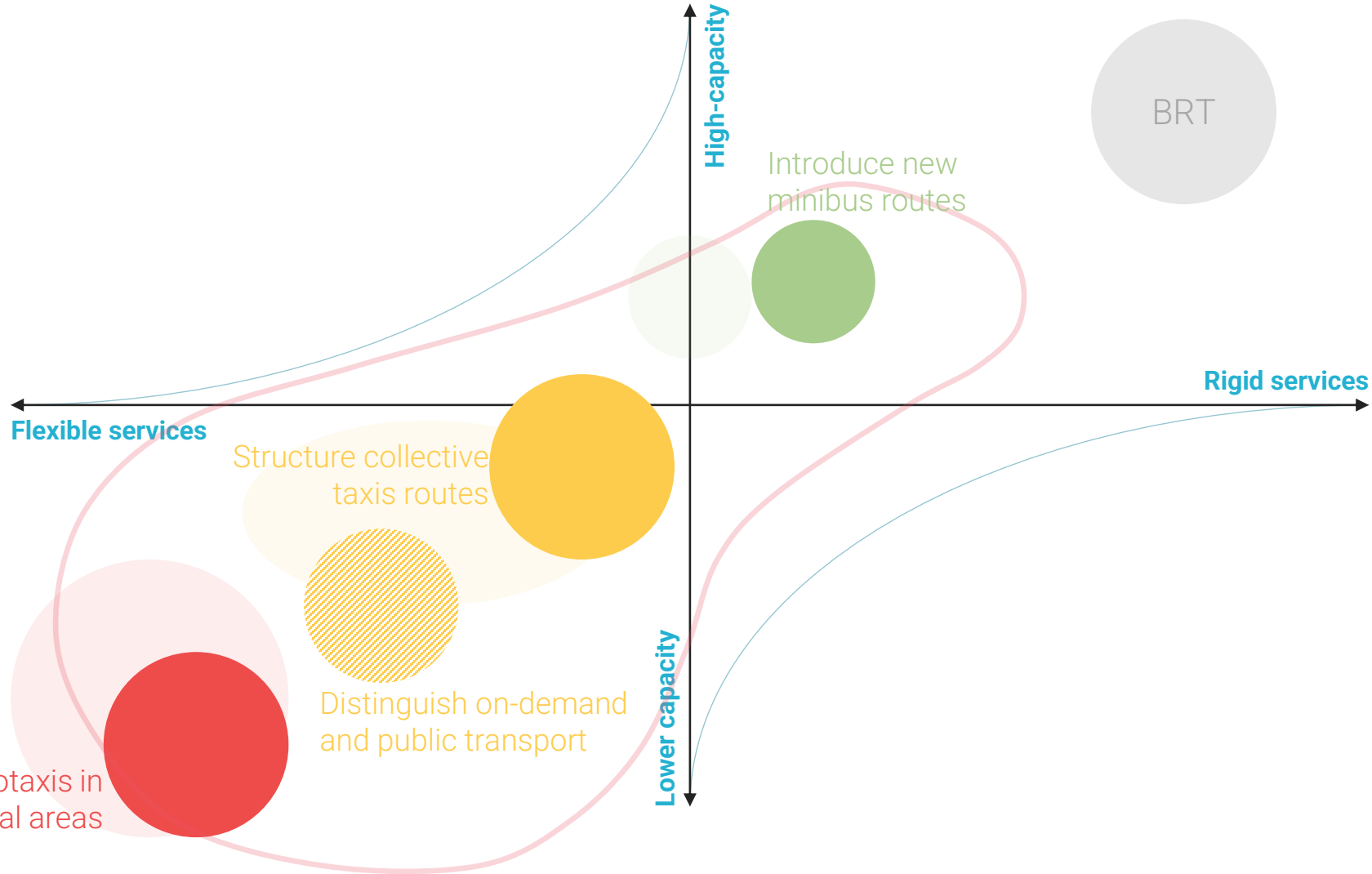
Legend



Mode capacity vs. Service flexibility

The example of Yaoundé
-The proposed situation-

Legend



Organise mototaxis in peripheral areas

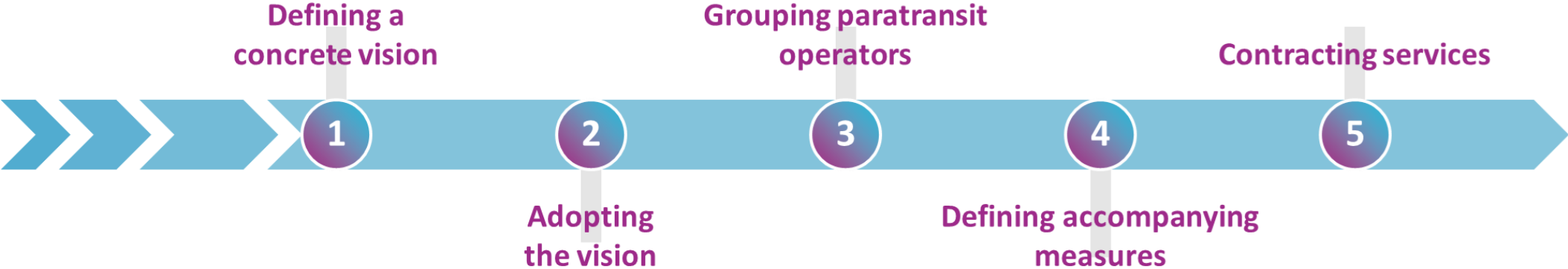
Structure collective taxis routes

Distinguish on-demand and public transport

Introduce new minibus routes

BRT

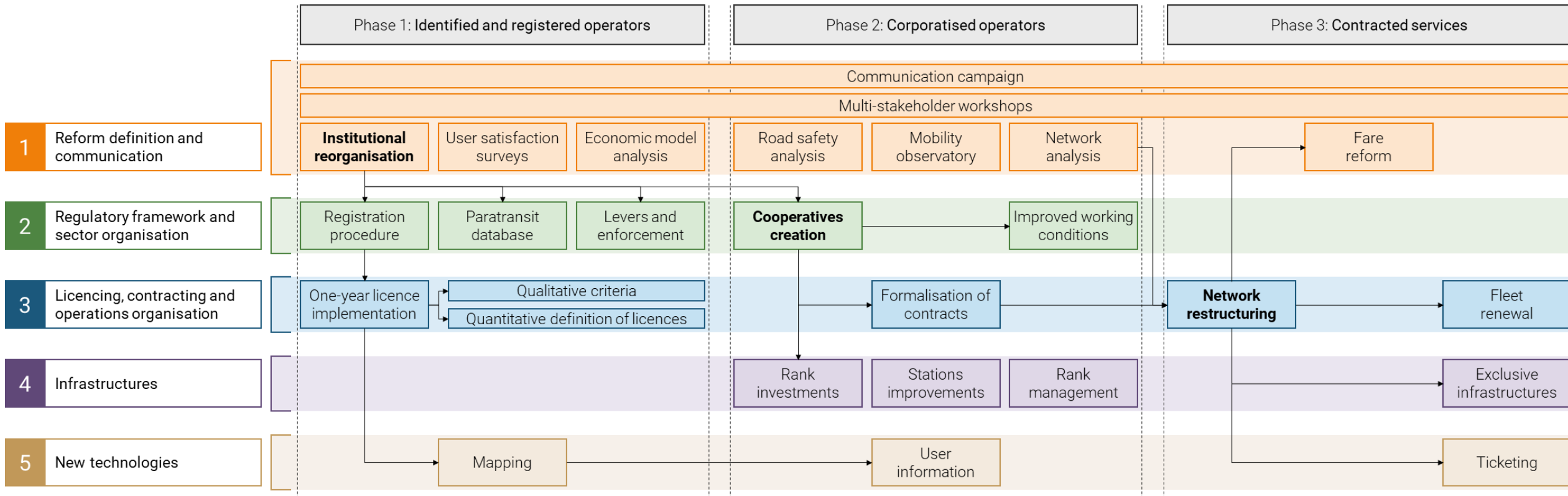
A need for progressivity



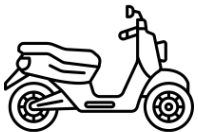
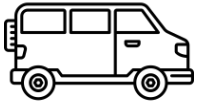
Paratransit in Jakarta, Indonesia | © C. Musil, 2012

A need for progressivity

The example of Yaoundé -The proposed roadmap-



Working on each mode separately?

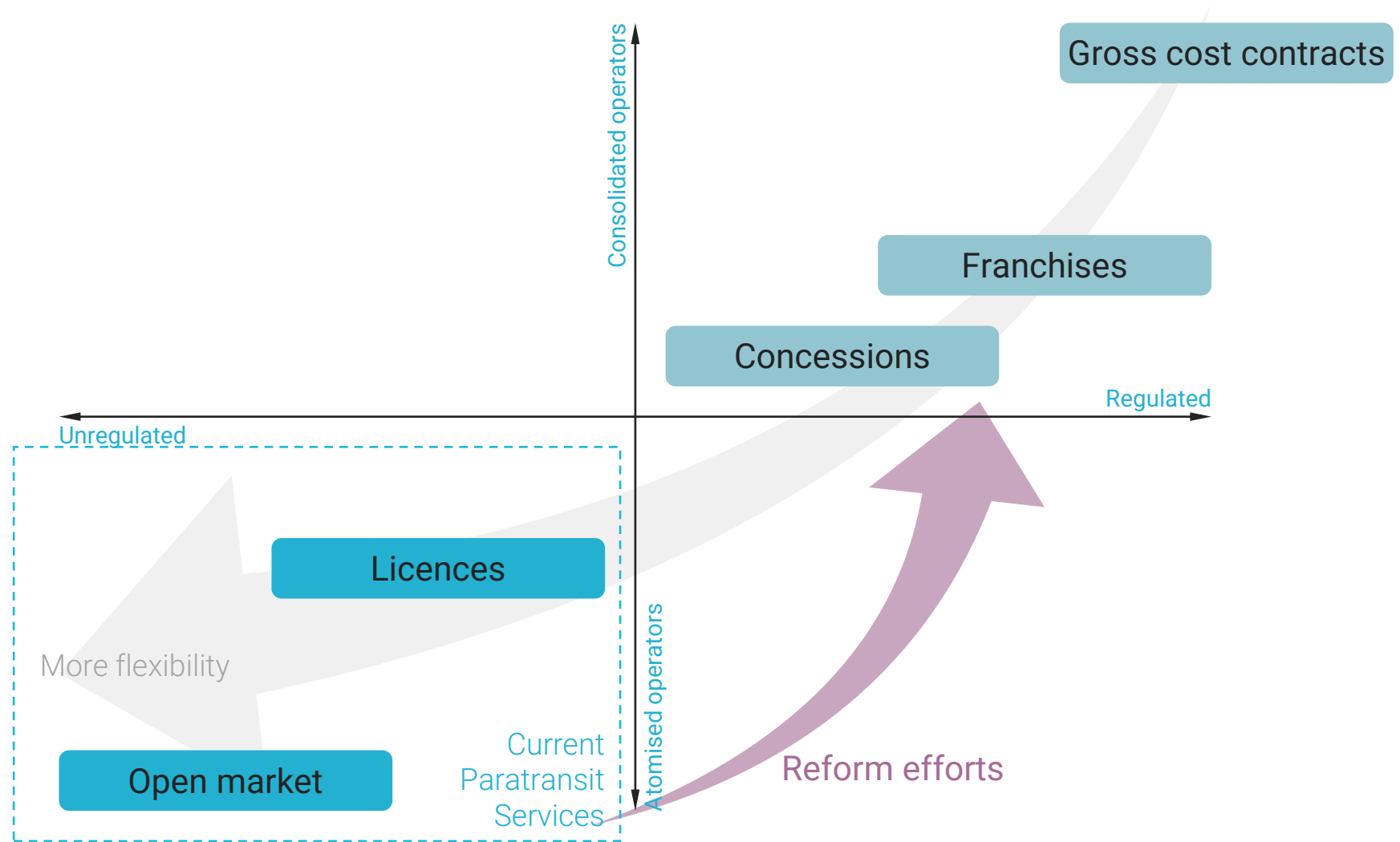


- Each mode, within a system, has distinct operational characteristics.
- Each mode has a level of professionalisation inherent to its operations.
- Each mode should have a different role (adapted to its characteristics) in a multimodal system.
- Each mode's stakeholders have different relationships with institutions and users.



Paratransit in Bangkok, Thailand | © C.Musil, 2022

Contracting with paratransit operators



4




Three axis for reform



Three main axis to measure reform efforts






Network



-  Line / route definition
-  Stops locations
-  Rank management
-  Services hours

Operations



-  Frequencies
-  Farebox management
-  Ticketing
-  Vehicle quantity
-  Vehicle specifications

Working conditions



-  Work contracts
-  Social coverage
-  Driving behaviours

SSATP published three cases of paratransit reform that depict different approaches and that highlight how to balance “sticks” and “carrots”.

Dakar’s fleet renewal



Diagnostic



- Highly **fragmented** paratransit sector.
- Low fares (decided by the Government) that **blocked fleet renewal** efforts.

Objectives



- To help **finance a new paratransit fleet**, while introducing new regulations.
- To consolidate and **professionalise** incumbent operators.

Outcomes



Network

Relative route reorganisation



Operations

Operators' consolidation

Loose regulatory improvements



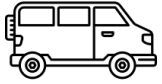
Working conditions

Improved working conditions

SSATP published three cases of paratransit reform that depict different approaches and that highlight how to balance “sticks” and “carrots”.

Cape Town’s BRT implementation

Diagnostic



- ▲ **Disruptively competitive** paratransit sector, hampering other modes.
- ▲ **Willingness** from the SA Government to reform the sector.

Objectives



- ▲ To use **BRT implementation** as a catalyst for transformation.
- ▲ To consolidate and **professionalise** incumbent operators.

Outcomes



+



Network

Improved system hierarchy



Operations

Operators' consolidation



Working conditions

Capacity building programme

-

Loss of paratransit role (BRT network)



SSATP published three cases of paratransit reform that depict different approaches and that highlight how to balance “sticks” and “carrots”.

Kigali’s systemic reform

Diagnostic



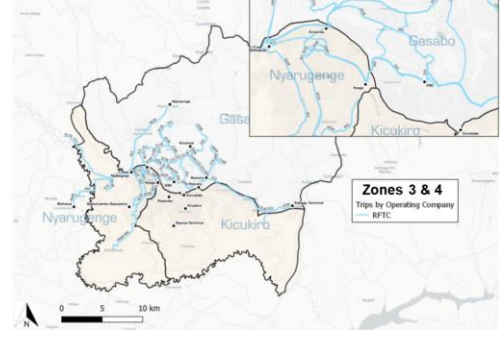
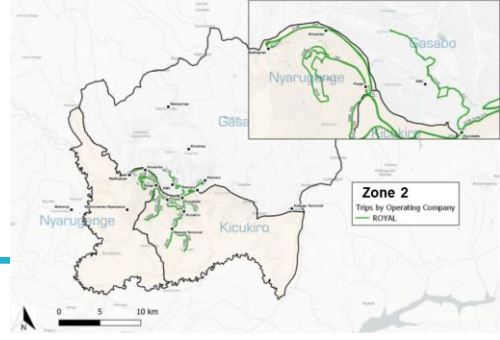
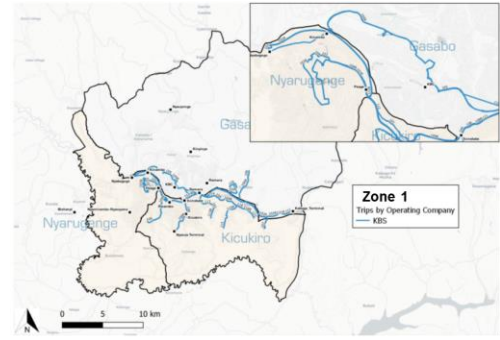
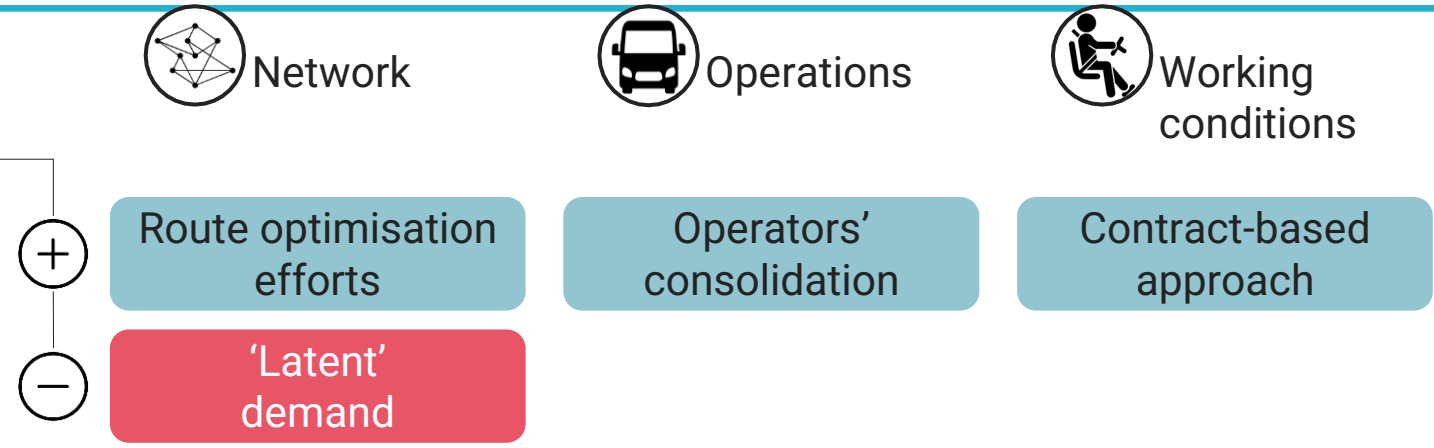
- Disorganised sector with **increasing competition** from low-capacity modes.
- Interest from consolidated **private companies** to operate new bus services.

Objectives

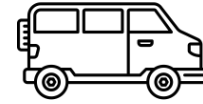


- To reorganise the entire system using **zone-based contracts**.
- To **corporatise** incumbent operators into one operating company.

Outcomes



Yes, there is a place for paratransit in SUMPs!



A multimodal vision to give each mode its most pertinent role in the system

Using paratransit advantages in the system (flexibility)



Paratransit and its modernisation

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